

IN THE CLAIMS:

Please cancel claims 10-15, 20-48, without prejudice.

Please amend the claims as follows:

2
X(Amended). A purified DNA molecule encoding a human uncoupling protein 3 which comprises the nucleotide sequence

T, 06/20
B1
[TCGAACTCAC TCACCTCCCC TCTCACCTCA CTGCCCTCAC CAGCCAGCCT
CTTGTCAAGT GATCAGGCTG TCAACCAACT TCTCTAGGAT AAGGTTTCAG
GTCAGCCTGT GTGTATAAGA CCAGTGCCAA GCCAGAAGCA GCAGAGACAA
CAGTGAATGA CAAGGAGGGG CCATCCAATC CCTGCTGCCA CCTCCTGGGA
TGGAGCCCTA GGGAGCCCT GTGCTGCCCT TGCCGTGGCA GGACTCACAG
CCCCACCGCT GCACTGAAGC CCAGGGCTGT GGAGCAGCTC TCTCCTTGGA
CTCCTCTCGG CCCTAAAGGG ACTGGGCAGA GCCTTCCAGG ACTATGGTTG
GACTGAAGCC TTCAGACGTG CCTCCCACCA TGGCTGTGAA GTTCCTGGGG
GCAGGCACAG CAGCCTGTTT TGCTGACCTC GTTACCTTTC CACTGGACAC
AGCCAAGGTC CGCCTGCAGA TCCAGGGGGA GAACCAGGCG GTCCAGACGG
CCCCGGCTCGT GCAGTACCGT GGCGTGCTGG GCACCACCT GACCATGGTG
CGGACTGAGG GTCCCTGCAG CCCCTACAAT GGGCTGGTGG CGGGCCTGCA
GCGCCAGATG AGCTTCGCCT CCATCCGCAT CGGCCTTAC GACTCCGTCA
AGCAGGTGTA CACCCCCAAA GGCGCGGACA ACTCCAGCCT CACTACCCGG
ATTTCGGCCG GCTGCACCAC AGGAGCCATG GCGGTGACCT GTGCCAGGCC
CACAGATGTG GTGAAGGTCC GATTCAGGC CAGCATAACAC CTCGGGCCAT
CCAGGAGCGA CAGAAAATAC AGCGGGACTA TGGACGCCTA CAGAACCATC
GCCAGGGAGG AAGGAGTCAG GGGCCTGTGG AAAGGAAACTT TGCCCAACAT
CATGAGGAAT GCTATCGTCA ACTGTGCTGA GGTGGTGACC TACGACATCC
TCAAGGAGAA GCTGCTGGAC TATCACCTGC TCACTGACAA CTTCCCCCTGC
CACTTTGTCT CTGCCCTTGG AGCCGGCTTC TGTGCCACAG TGGTGGCCTC
CCCGGTGGAC GTGGTGAAGA CCCGGTATAT GAACTCACCT CCAGGCCAGT
ACTTCAGCCC CCTCGACTGT ATGATAAAGA TGGTGGCCCA GGAGGGCCCC
ACAGCCTTCT ACAAGGGATT TACACCCCTCC TTTTTGCGTT TGGGATCCTG
GAACGTGGTG ATGTTCGTAA CCTATGAGCA GCTGAAACGG GCCCTGATGA
AAGTCCAGAT GTTACGGGAA TCACCGTTT GAACAAGACA AGAAGGCCAC

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TGGTAGCTAA CGTGTCCGAA ACCAGTTAAG AATGGAAGAA AACGGTGCAT
CCACGCACAC ATGGACACAG ACCCACACAT GTTTACAGAA CTGTTGTTA
CTTGTGCTG ATTCAAGAAA CAGAAGTAGA AGAGAGAGGA TTCTGGTCTT
CACTGCCATG CCTCAAGAAC ACCTTGTT TGCACTGACA AGATGGAAAA
TAAATTATAT TAATTTTGA AACCCATTAG GCATGCCTAA TATTTAGGCA
AGAGAAAATA AACCAAGATA GATCCATTG GACAAAATGG AAGGTTGGAG
ACGTGTATCC CCGTGAAATC TGGTCAGATA ATGAATGATA AGCAGGAAGG
ATGGCAAGCA CGGGACAGGA GGGGCCACA ATGGAGTGGG AGATCAGCCA
CGGAGCCTGG AGGGACGCCA CCCAGCAACA CAGAGCTGGC GACTGCAGCT
GCACCACATCAC ACATGCATCA TCAGCCTATT TGTAATATGT CTGCCACAGA
GAGTCCTTG GGATTCTAGG AAACCCAAGG ACAAGAGAA AAAACTAGAG
CCTGTGCTAA AGAACGCTGC TGGGCCATG TGAGGCTGGG GTCGTAAATA
TTCCCCGACG ACACTGAAGA ATCAAGAGGG CAGCCCCCAC TTCTCCTACA
AAATGGAGGG AGCCATCCCT TCCCTGTCCA CCTCACCAAGG GGTGCTATGA
CATGCAAGTG AGAACGCTGGG CATGAACGCA CTTTATAAAA GCAAAAGCTC
TGTGTAAATC TAACTACAAG GACAATGCCT TGGGAGAGAT TTTGTGGGA
CAGAGAGGAG TTGCCAGGGA AGAAGGTTG AAAGATACGG TTGTCTAGAG
GTGAGACCAA AGGATCCAGA GACTTGGGA CCAGAGGTGA CAGTGGATGA
CGTGAAGCCA CAGGAGCCCC ACCCCCAGC AGCTTTTCC CCACCCCCC
CACACGCGC TCAATCATGA GTACCTCAAA GGATTGTTGG GCTTGGGGGA
AAAGAGGTGG ATTCTGGGC AAGAACCTAA AGTAGCAGGA,
disclosed] as set forth in SEQ ID NO:11.

B (Amended). A purified DNA molecule encoding human uncoupling protein 3 wherein said DNA molecule encodes a protein comprising the amino acid sequence

B [MVGLKPSDVPPTMVKFLGAGTAACFADLVTPLDTAKVRLQIQGENQAVQTARLVQY
RGVLGTLTMVRTEGPCSPYNGLVAGLQRQMSFASIRIGLYDSVKQVYTPKGADNSSLT
TRILAGCTTGAMAVTCAQPTDVVKVRFQASIHLGPSRSDRKYSGTMDAYRTIAREEGVR
GLWKGTLPNIMRNAIVNCAEVVTYDILKEKLKDYLHLLTDNFPCCHVSAFGAGFCATVVA
SPVDVVKTRYMNSPPGQYFSPLDCMIKMVAQEGLTAFYKGFTPSFLRLGSWNVVMFVTY
EQLKRALMKVQMLRESPF,] as set forth in [three-letter abbreviation in] SEQ ID NO:12.
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16(Amended). A purified DNA molecule encoding human uncoupling protein 3 which consists of the nucleotide sequence

TCGAACCTCAC TCACCTCCCC TCTCACCTCA CTGCCCTCAC CAGCCAGCCT
CTTGTCAAGT GATCAGGCTG TCAACCAAAT TCTCTAGGAT AAGGTTTCAG
GTCAGCCTGT GTGTATAAGA CCAGTGCCAA GCCAGAAGCA GCAGAGACAA
CAGTGAATGA CAAGGAGGGG CCATCCAATC CCTGCTGCCA CCTCCTGGGA
TGGAGCCCTA GGGAGCCCCT GTGCTGCCCT TGCCGTGGCA GGACTCACAG
CCCCACCGCT GCACTGAAGC CCAGGGCTGT GGAGCAGCTC TCTCCTTGG
CTCCTCTCGG CCCTAAAGGG ACTGGGCAGA GCCTTCCAGG ACTATGGTTG
GACTGAAGCC TTCAGACGTG CCTCCCACCA TGGCTGTGAA GTTCCTGGGG
GCAGGGCACAG CAGCCTGTT TGCTGACCTC GTTACCTTTC CACTGGACAC
AGCCAAGGTC CGCCTGCAGA TCCAGGGGGA GAACCAGGCG GTCCAGACGG
CCCGGCTCGT GCAGTACCGT GGCCTGCTGG GCACCACCT GACCATGGTG
CGGACTGAGG GTCCCTGCAG CCCCTACAAT GGGCTGGTGG CGGGCCTGCA
GCGCCAGATG AGCTTCGCCT CCATCCGCAT CGGCCTTTAC GACTCCGTCA
AGCAGGTGTA CACCCCCAAA GGCGCGGACA ACTCCAGCCT CACTACCCGG
ATTTTGGCCG GCTGCACCAC AGGAGCCATG GCGGTGACCT GTGCCAGGCC
CACAGATGTG GTGAAGGTCC GATTCAGGC CAGCATACAC CTCGGGCCAT
CCAGGAGCGA CAGAAAATAC AGCGGGACTA TGGACGCCTA CAGAACCATC
GCCAGGGAGG AAGGAGTCAG GGGCCTGTGG AAAGGAACCT TGCCCAACAT
CATGAGGAAT GCTATCGTCA ACTGTGCTGA GGTGGTGACC TACGACATCC
TCAAGGAGAA GCTGCTGGAC TATCACCTGC TCACTGACAA CTTCCCTGC
CACTTGTCT CTGCCCTTGG AGCCGGCTTC TGTGCCACAG TGGTGGCCTC
CCCGGTGGAC GTGGTGAAGA CCCGGTATAT GAACTCACCT CCAGGCCAGT
ACTTCAGCCC CCTCGACTGT ATGATAAAGA TGGTGGCCCA GGAGGGCCCC
ACAGCCTTCT ACAAGGGATT TACACCCTCC TTTTGCGTT TGGGATCCTG
GAACGTGGTG ATGTTCGTAA CCTATGAGCA GCTGAAACGG GCCCTGATGA
AAGTCCAGAT GTTACGGAA TCACCGTTT GAACAAGACA AGAAGGCCAC
TGGTAGCTAA CGTGTCCGAA ACCAGTTAAG AATGGAAGAA AACGGTGCAT
CCACGCACAC ATGGACACAG ACCCACACAT GTTTACAGAA CTGTTGTTA
CTTGTGCTG ATTCAAGAAA CAGAAGTAGA AGAGAGAGGA TTCTGGTCTT
CACTGCCATG CCTCAAGAAC ACCTTTGTT TGCACTGACA AGATGGAAAA
TAAATTATAT TAATTTTGA AACCCATTAG GCATGCCTAA TATTTAGGCA
AGAGAAAATA AACCAAGATA GATCCATTG GACAAAATGG AAGGTTGGAG

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B3

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ACGTGTATCC CCGTGAAATC TGGTCAGATA ATGAATGATA AGCAGGAAGG
ATGGCAAGCA CGGGACAGGA GGGGCCACA ATGGAGTGGG AGATCAGCCA
CGGAGCCTGG AGGGACGCCA CCCAGCAACA CAGAGCTGGC GACTGCAGCT
GCACCACATCAC ACATGCATCA TCAGCCTATT TGTAATATGT CTGCCACAGA
GAGTCCTTTG GGATTCTAGG AAACCCAAGG AACAAAGAGAA AAAACTAGAG
CCTGTGCTAA AGAACGCTGC TGGGCCATG TGAGGCTGGG GTCGTAAATA
TTCCCCGACG ACACTGAAGA ATCAAGAGGG CAGCCCCAC TTCTCCTACA
AAATGGAGGG AGCCATCCCT TCCCTGTCCA CCTCACCAAGG GGTGCTATGA
CATGCAAGTG AGAACGCTGGG CATGAACGCA CTTTATAAAA GCAAAAGCTC
TGTGTAAATC TAACTACAAG GACAATGCCT TGGGAGAGAT TTTGTGGGA
CAGAGAGGAG TTGCCAGGGA AGAAGGTTG AAAGATACGG TTGTCTAGAG
GTGAGACCAA AGCATCCAGA GACTTGGGA CCAGAGGTGA CAGTGGATGA
CGTGAAGCCA CAGGAGCCCC ACCCCCAGTC AGCTTTTCC CCACCCCCC
CACCAACGCGC TCAATCATGA GTACCTCAA GGATTGTTGG GCTTGGGGGA
AAAGAGGTGG ATTCCCTGGGC AAGAACCTAA AGTAGCAGGA,
disclosed] as set forth in SEQ ID NO:11.

11

17(Amended). A purified DNA molecule encoding a human uncoupling protein 3 wherein said DNA molecule encodes a protein consisting of the amino acid sequence

[MVGLKPSDVPPTMVKFLGAGTAACFADLVTPLDTAKVRLQIQGENQAVQTARLVQY
RGVLGTLITMVRTEGPCSPYNGLVAGLQRQMSFASIRIGLYDSVKQVYTPKGADNSSLT
TRILAGCTTGAMAVTCAQPTDVVKVRFQASIHLGPSRSRDKYSGMTDAYRTIAREEGVR
GLWKGTLPNIMRNAIVNCAEVVTDILKEKLLDYHLLTDNFPCHFVSAFGAGFCATVVA
SPVDVVKTRYMNSPPGQYFSPLDCMIKMVAQEGPTAFYKGFTPSFLRLGSWNVVMFVTY
EQLKRALKVQMLRESPF,

as set forth in [three-letter abbreviation in] SEQ ID NO:12.

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18(Amended). A process for the expression of a human uncoupling protein 3 in a recombinant host cell, comprising:

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(a) transfecting the expression vector of claim 1 into a suitable host cell; [and,]

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